

It is not strange that few of the people know little about the peony, the king of perennial flowers. The improvement by introduction of new varieties during recent years has outstripped imagination, but where the new forms are known the old fashioned "pinks" of our grandmother's garden have gone to the discard, except, perhaps, the Official's rubra.

It is scarcely credible that any plant could be susceptible of so great improvement in so short a time. On the other hand, it is only by almost infinite patience on the part of the hybridizer that the new choice varieties are obtained from thousands of trials. After waiting five or six years for the perfect flower from a batch of seed, not one variety may be obtained showing improvement over the existing 2,000 sorts. Other attempts may be rewarded by one of those rare creations which sets all peony growers scrambling for a root.

Originating a new variety is one process, but increasing that variety for the market is quite another. As stock of the peony can be increased only by the exceedingly slow process of dividing the roots, it is obvious that the prices must continue high for many years. Other plants may be rapidly increased by budding or grafting, by cuttings or by seed, and the new variety widely distributed in two or three years. Moreover, the roots of some of the choicest new peonies do not increase as rapidly as others, and, therefore, these varieties never will become as cheap. One of the best white varieties, Festiva maxima, introduced over sixty years ago, still commands a larger price than many newer sorts. It is a strong grower; but it does not multiply rapidly and the supply of stock does not exceed the demand. To some not familiar with this multiplication of various perennials peony plants seem high in price, especially the newer varieties, not widely distributed. Contrast, for example, the well known "Sweet William." If the grower could sell all the "Sweet Williams" or other hardy plants grown from seed he could afford to grow twenty plants for the price of one peony; for "Sweet Williams" could be grown by the millions in one year, whereas it would take many years to grow 100 salable plants from a new peony.

There is another fact which the purchaser should consider. Though it takes the grower years to produce a good variety, the purchaser of a peony has something which is not merely permanent and little expense after the first cost; but actually grows more valuable with age. The plant requires only ten to fifteen square feet of space and the sixth season will produce fifty to 100 blooms six to eight inches in diameter. This one season's bloom is readily worth in market \$5 to \$10, and to peony enthusiasts is priceless.

As to varieties, some are more prolific than others and one should get the grower's advice if not quite certain which to select. There are fifty to 100 varieties that are generally acknowledged to be worthy of a place in any collection, and other new and



Peony Augustin d'Hour.

scarce varieties that may prove their worth even at higher prices. In a collection of fifty peonies costing from 50 cents to \$1.50 each there should be included at least the nine white varieties named below to cover early, midseason and late period of bloom; thus giving a full month of white peonies. For the same reason other colors should be carefully selected.

List of Fifty Peonies To Cover a Month of Bloom.
White—Avalanche, Baroness Schroeder, Couronne d'Or, Festiva Maxima,

La Plancee, Marie Lemoine, Marie Jacquin, Mme. de Verneville, Mme. Emile Lemoine.

Yellow—Alba Sulphurea, Dr. Bretonneau (Guérin), Duke of Wellington, Duchesse de Nemours, Palomelle, Blush or Flesh—Albert Crousse, Asa Gray, Eugene Verdier, Germaine Bigot, Grandiflora, l'Etoile de Hollande, Marguerite Gerard, Mile. Rousseau, Mme. de Gahau, Octavie Demay, Triomphe de l'Exposition de Lille.

Medium Pink—Eugene Verdier, Gloire de Charles Gombault, Jeanne d'Arc, Lamartine, Livingston, Mme. Barillet Deschamps, Mme. Emile Galle, Mons. Jules Elie, Venus, Despot Pink—Claire du Bois, General Bertrand, Modeste (Guérin), Mons. Bouchard Aine, Petite Renee, Red—Augustin d'Hour, Directeur Aubrey, Felix Crousse, Rubra superba, Ville de Nancy, Official's rubra, Deep Red and Purple—Adolphe Rousseau, de Candolle, Mile. Bucquet, Mikado, Prince de Talidyle.

S. G. Harris.

SCARLET GLOBE RADISH.

The scarlet globe white tip radish is one of the best for the home or market gardener. The shape is attractive and also the color, a beautiful oval and rich scarlet, with a white tip; the flesh is tender, crisp and mild. It is good for the outdoor garden or for forcing. It is not a good radish for summer sowing. The last of August and the first of September sowings may be made in the open ground in the vicinity of New York. Where the season is shorter the seed should be sown in cold frames and protected with manure when the weather is cold.

This is a popular radish in the market all over the country, though in some sections those with little white at the tip bring the best price. In other sections those about half white and half scarlet bring the best price, while in other localities those about a third scarlet and two-thirds white are in greatest demand. Market gardeners should know their market and sow seeds of the varieties that will bring the best prices.

When forcing it pays to sift the seed, grading in this manner. Seed of a uniform size will mature all at one time, so the entire row can be cleared off at once, replanting the space for a second crop.

Sowings of radishes can be made up to the first of September. Seed sown during the hot summer months must be firm into the soil. After the furrow has been made for the seed and before covering they should be pressed into the bottom of the furrow with the back of the hoe or with the sole of the foot.

The scarcity of sugar has made a great demand for honey. Honey can be used in place of sugar for cooking. Children relish bread or biscuits and honey.

The Farm Bureau, 160 Nassau street, New York, has organized a service for supplying second hand implements to

farmers from other farmers who have tools they have no use for. Money is turned by the buyer and an idle tool turned into cash by the seller.

RASPBERRY RUST.

What can be done to my raspberry bushes where the tips are stung or bitten and die? They are all in second fruiting—having as many as twenty berries and often more on a cane. So many are broken off and dead at the tip. First the crop was ruined by the June 23 freeze and then the drought. Now they look so well I do not like their being ruined, especially when full of fine fruit. Sunday Star garden page is most helpful and interesting.—J. C. M., Boonville, Aug. 24.

Spraying with potassium sulphide arrests the spread of the disease, which will appear every season. The best plan is to pull up and burn the bushes, and free from blight. With the plants and all diseased leaves that have fallen. Set out new healthy plants in a different part of the garden. Spray the new plants several times each season with weak Bordeaux mixture; if used full strength the foliage will be scorched.

CANNING TOMATOES.

Many housekeepers prefer the open kettle method.

In the open kettle method select tomatoes that are ripe, but not over-ripe, and free from blemishes. Only a few jars should be canned at a time. Carry the canning process through quickly. Scald the tomatoes for from one-half a minute to two minutes, dip them into cold water and remove them quickly. With a sharp knife remove the stem core and the skin.

Place one layer of tomatoes in an enameled kettle, and for every quart add one teaspoonful of salt and from one to three teaspoonfuls of sugar. Add no water. Bring the mass to the boiling point, and boil for from six to ten minutes. Large tomatoes should be turned during the cooking.

With a sterilized spoon, ladle them into jars that have been sterilized by being boiled for twenty minutes; fill the jars to overflowing. Adjust the rubbers that have been placed in boiling water for five minutes, and the covers that have been sterilized with the jars. Seal the jars and invert them to cool.

WHY NOT IN NEW YORK?

In Boston municipal markets at which farmers sell their products direct to the public were opened September 2.

Hawkers and peddlers were barred from participation in this market business; the proposition is open only to farmers who raise produce on their own farms.

The markets are conducted in different sections of the city on different days, as follows: Monday, Jamaica Plain; Tuesday, Roxbury Crossing; Wednesday, East Boston; Thursday,

Uncle Sam is asking New York State farmers to help him grow more wheat—the world's greatest breadstuff. If you're hesitating because of lack of ready funds, we can help you.

We will loan, on approved 6% notes, any sum needed up to \$10 an acre for seeding wheat ground. No signature but your own will be required. You can use the money to buy seed and fertilizer and to pay for labor and equipment.

The earlier you start, the better the crop will probably be; so write us at once. Tell us how many acres you intend to plant and how much you will need.

We also loan money to purchase Hogs and Sheep.

MONEY TO GROW WHEAT

PATRIOTIC FARMERS FUND
M. W. COLE, Secretary UTICA, N. Y.

South Boston; Friday, Charlestown, and Saturday, Dorchester.

City parks and playgrounds are used for the markets, which open at 6 o'clock in the morning. It is understood that the markets close at noon, although this point is not quite clear in the reports received.

The markets were all well attended. The farmers offered a fine display of fresh fruits and vegetables that the purchaser obtained at the farmers' price. The prices were higher than some purchasers expected, but lower usually than the prices of peddlers and retail stores, besides the satisfaction of obtaining strictly fresh produce. All fruits and vegetables deteriorate with age and it is a decided advantage to the consumer to get them fresh, which is possible by this method.

Regarding the matter of price, if the consumer pays no more to the farmer than to the middleman it will be a real benefit eventually to the consumer.

No producer can continue for long to put into the production of an article more than he receives for it, including a fair profit. If the producer is able to receive a better price than formerly he will endeavor to produce a better article than his competitor and thus make a demand and obtain a quick market for his goods. In this way the farmer will be encouraged in his efforts to excel and the consumer will benefit.

Naturally cutting out middlemen benefits both consumer and producer.

New York city has many public places where municipal markets might be opened one or two days a week in various parts of the city. These markets should be open only to the growers and the buying public. Near-by cities, such as Jersey City, Newark, Mount Vernon, &c., should have similar markets.

Proper publicity will insure a good display of fresh fruits and vegetables and purchasers for everything attractive offered.

This is a time when the producers of foodstuffs should be encouraged and the consumers supplied food at the lowest possible price. There is no place now for food profiteers.

New Jersey farmers believe there should be many bridges over or tunnels under the Hudson River for public vehicles; that our Government has been neglectful in the past in not compelling the building of such structures for the good of the public, but particularly as means of saving time and money for the traveling public. The sea need many links to connect them with the rest of the United States. Numerous bridges and tunnels across the Hudson would have a permanent beneficial effect on the supply and cost of food not only in New York city but over a wide territory.

WINTER HURT APPLE TREES.

Young apple trees that grew most vigorously in 1917 it now appears were generally injured most by last winter's severe weather. In the case of bearing trees the most serious injury was to trees that bore a heavy crop in 1917, but where the crop was uniform the weaker older trees were the most injured. Trees of any fruit, with the possible exception of the apple, that are plainly too weak to be worth keeping should be removed to avoid injury to good trees from shot hole borers, according to the State College of Agriculture.

In case of an apple or a pear tree of which a considerable portion of the top has held its foliage during the summer it would seem wise to wait until growth has started next summer before deciding to remove it or to prune it severely. While dead branches may be removed at any time, those that appear weak now may look much better when growth starts next season. There will then be a new layer of sapwood to conduct water to the leaves.

Since the weaker shaded branches are the ones that have been most injured, except where the tree was injured because of the heavy 1917 crop, many apple trees that look bad now are worth more than they seem to be. It would seem wise, therefore, if in pruning such trees only dead wood were removed until after next season's growth; then weak wood could be removed more intelligently.

Peach trees that have made but a few inches of growth in most cases had better be removed.

Since peach trees have also been badly injured in other peach growing sections that compete with New York, this would seem to be a good time for skilled peach growers to plant. The injury to the buds in the nurseries has been great and for this and other reasons the supply of peach trees for planting next spring will be very small. The prospective planter therefore, would do well to place his order for young trees soon.

Sow spinach in September for spring use. Protect the plants during winter by covering of hay or leaves. Spinach requires rich soil. Stable or sheep manure makes the best fertilizer. Sow the seeds thickly, one inch deep, in rows 10 to 12 inches apart.

Acid phosphate must be depended on for the fall fertilizer for grain crops. Use not less than 200 pounds to the acre; 300 to 400 pounds is better; 16 per cent. acid phosphate. Raw rock phosphate is the next best fertilizer, 600 to 1,000 pounds per acre.

The production of potatoes in New York this year is estimated at \$4,000,000 bushels, 5,000,000 bushels less than last year's crop and but 2,000,000 more than an average crop. This is the official estimate, subject to change.

The barley and rye crops of the whole country will exceed all previous records and about the same will be in the same class.

For autumn grain plough as early as possible. Early ploughing retains moisture and permits the accumulation of available nitrogen. The stubble of the previous crop turned over has time to rot and act as a fertilizer. The weeds are killed and the moisture and nourishment they would consume remain in the land. This is equally true in the flower and vegetable garden.



New Hybrid Pyrethrums.

1. Queen Mary. 2. Cactus. 3. Rutherford. 4. Purity. 5. Rosy Morn. 6. James Kelway.

Pyrethrums are vigorous perennial plants, excellent for rockeries or borders. They are showy, hardy and easy to grow, thriving in hot, dry or rainy weather. The plants soon form large clumps which may be divided and transplanted in the spring. Good sized clumps set out in the autumn will get an early start and flower well the following spring.

Some of the flowers of the new hybrids resemble chrysanthemums; others look more like single dahlias, while some might be a cross between

the two, judging solely by the appearance of the flowers. The long stiff stems make them useful for decorative purposes. The fern like foliage works in well with the flowers. The attractiveness of the plant and flowers and its simple cultural requirements are sure to make it popular.

Pyrethrums are in their fullest beauty in June, but flower on through the entire summer and autumn. They thrive in any good garden soil, but the more manure is incorporated with the soil the better they grow. Mulching is particularly desirable in dry soil.

PET STOCK AT STATE FAIR.

Everybody and their neighbors are interested in pet stock. Pet stock is the name given to animals raised primarily for pets, although some pet stock is used for food, or scientific purposes.

Included under the head of pet stock are cats, bantam chickens, white rats, white mice, dancing mice, guinea pigs, rabbits, cats, fish, animals used for terrariums and aquariums, pigeons, ferrets and others.

In the pet stock show there are more than 1,000 entries as compared with 485 last year. The display of rabbits will be one of the best ever made in the State. Pigeons are chased with poultry and figure with the poultry entries. The pigeon and poultry display will be equal to the best in the history of the fair and will possibly break the record for the number of entries. The big poultry building will be filled to overflowing.

Mrs. M. M. Gusevich has made the largest entry of rabbits, and despite the scarcity of guinea pigs a very large and varied display will be made.

The entries of cattle up to August 25 were sufficient to completely fill the big cattle barn. This is a remarkable considering freight conditions and the difficulty in getting men to care for herds.

Farmers will find a large display of farm machinery, including the newest labor saving devices. It will be worth a trip from any part of the State to learn how new machinery can help solve the labor problem on farms.

Farmerettes will be present to show their ability in handling farm machinery and turn of farm work. To think of a place operated by these neat little women is a temptation to buy a farm and set a flock of them at work.

FIRE GUARDS TO PROTECT GRAIN.

Fire guards of one or more furrows should be ploughed around all fields of shocked or stacked grain, advises the United States Department of Agriculture, to prevent conflagrations starting from the sparks of locomotives, tractors, threshing engines or from the careless use of matches, pipes or cigarettes. The urgency of the situation demands that farmers make practical application of this control. Farms also should have available fire fighting equipment, such as chemical extinguishers or barrels and buckets of water.

These first aids in fire fighting are extremely valuable protection for the grain in the stack or bin, as well as for the farm buildings and other produce or live stock in storage or stable. Precaution should also be exercised against the "box" and other incendiary property adjusted machinery which are possible sources of loss.

How annoying it is for gardeners who turn to gardening books for information on the culture of any plant to find a long and glowing description end with "divisions or seeds!" To one who wishes to know when to sow the seeds, where and just how it is vexatious to take down book after book from the library shelves and then not be able to obtain the information wanted. Where this trouble is experienced write to THE SUN Garden Department, and what is desired will be promptly supplied.

The Department of Agriculture, January, 1917, had a staff of more than 16,000 people. Since that time the number has been considerably increased.

store where there is little variation of temperature. If moist when stored or allowed to collect moisture they will become mouldy or start to germinate. Flower seeds may be saved in the same manner.

WATCH OUT FOR FALL COLDS.

While getting pullets in shape for maximum egg production it is important to avoid the condition commonly known as "fall colds." Perhaps the chief cause of colds in crowding chickens in roosting houses which are not properly ventilated. Even if no cold results birds which are forced to breathe hot, impure air will suffer considerably and will be slower in growing. An excellent plan for a summer roosting house is simply a frame roofed over to protect the birds from storms and if protection from enemies is necessary covered on the sides with wire netting.

If an ordinary colony house is used it should at least have a generous rear ventilator. If the house is of the shed roof type and twelve feet long the ventilator should be five or six feet long by fifteen inches high and situated just beneath the plate in the middle of the rear wall of the house. If hinged at the top to swing out there will be no danger of rain driving in. Then if the roosts are placed one and a half or two feet below the lower edge of the opening there will be no danger of direct draught on the birds.

Fall colds ordinarily appear just as a case of "snuffles" with a slight rattle in the throat. The surest way to detect them is by going among the birds at night. Any bird that is wheezing is then easily located. Furthermore, a distinct and characteristic odor will be noticed if many birds are affected.

The only sure preventive measure is ample ventilation of the roosting houses. This is necessary because of the very large amount of moisture which fowls give off from their lungs. To keep the air reasonably dry this excess moisture must be carried away about as rapidly as it is expelled from the lungs. To handle the situation successfully requires considerable air circulation through the house, either in mild cases of colds prompt provision for ventilation of the roosting quarters will ordinarily bring about a rapid cure. If this does not suffice the easiest practice and, all things considered, perhaps the best is to remove the affected individuals and place them in an open yard where they will be compelled to go into the trees to roost. This strictly fresh air treatment will usually bring results.—Leslie E. Card, Connecticut.

PLANT DAFFODILS, TULIPS AND PEONIES this fall, for gorgeous blooms next spring. With ordinary care they are no trouble to grow. For more information, apply to June of wonderful colors seen in our show house.

Illustrated Catalogue describes and illustrates all the best—(60 pages)—mail order—everywhere.

VAUGHAN'S SEED STORE
21-23 W. Randolph St., Dept. B, Chicago
43 Barclay Street, Dept. E, New York

FARM PRODUCE.
HONEY.

Only sweetest our Forefathers knew. Pure New York State Bee-made honey, 5 lb. pails, \$1.00; 10 lb. pail, \$1.10, and 50 lb. can, \$5.00. Delivered to your door. For pure Clover or Buckwheat honey, write to The Honey Trust Co., New York, N. Y.

NEW CLOVER HONEY—10 lb. pails, \$2.00; 50 lb. can, \$10.00. Delivered to your door. For pure Clover or Buckwheat honey, write to The Honey Trust Co., New York, N. Y.

SWINE.
Registered Baby Duroc Pigs now ready for sale. Single pigs, \$10 each; 25 per pair or 50 per pair. Make your order now. For pure farrow, \$15 each. Place your order now. Start right with a stock from the largest champion herd of Duroc pigs in the East. BELLEVILLE STOCK FARM, Belleville, N. Y.

LAMBS.
Make good lawn mowers. Keep lambs on the lawn as the President does. Keep the grass in good order and pay the owner a profit. Make your order now. For pure farrow, \$15 each. Place your order now. Start right with a stock from the largest champion herd of Duroc pigs in the East. BELLEVILLE STOCK FARM, Belleville, N. Y.

CATS.
BEAUTIFUL ANGORA CATS AND KITTENS, \$1.00 up. STAMP FOR REPLY. 141 VIEW PARK, North Haven, Maine.

POULTRY.
SACRIFICE SALE.
Cyphers incubators and supplies for less than cost of manufacture.

In order to turn some of our surplus stock into cash.
Sale to be continued this week only.

THE MACNITT HORTICULTURAL CO., INC.
The Largest Poultry Supply, Seed and Plant Salesmen in the World.
12-14 West 34th St., New York

PULLETS.
Pedigreed S. C. W. Leghorns
Wm. H. Zappell, Toms River, N. J.

CHICKENS, 15 CENTS EACH AND UP.
No mail orders for this stock accepted. Your opportunity to get stock for less than cost of production.
Call and select the stock at our salesrooms.

THE MACNITT HORTICULTURAL CO., INC.
The Largest Poultry Supply, Seed and Plant Salesmen in the World.
12-14 West 34th St., New York

IT'S TOO LATE TO FOOL WITH BABY CHICKS
and late hatched pullets, and with eggs at present prices and steadily going higher you want to get eggs just as soon as you can from

PULLETS
that will lay in early fall. We have 1000 Rocks, White Rocks, R. I. Reds, Minorcas, &c., at following reasonable prices for pure bred stock:

Early March hatch, now "singing" will lay in few weeks, \$1.50 each; late March and early April, early laying Nov., \$1.25 each; late April, early hatching and laying Nov., \$1.00 each; any die within 20 days replaced free.

Pen 6 yearling Black Minorca Hens, 1 Spring Turkey, \$1.50 each.
L. I. Ducks, white Pekin or Indian Runner.

PIGS
You'll need just this winter. Six, eight and ten week old Berkshire and Chester Whites, \$10.00 each; 15 lb. can, \$1.00. Laying hens (yearlings), Leghorns, white or brown, \$1.50 each; heavy bred, \$1.25 each; Young Male, \$1.00 each.

Order direct from this ad, avoid unnecessary correspondence.
Our bank reference, First National, Westport, L. I.

BALDWIN POULTRY PLANT
BALDWIN, L. I.

Phone "Freeport 311" P. O. Box 55, One block north Mineola-Brooklyn trolley "Stop 32," near Deedle Grocery Co.'s old store, Church St.

WORLD'S CHOICEST NEW PYRETHRUMS

The perfection of our new hybrids has been attained by years of constant selection. The range of color is from the purest white to a deep glowing crimson with wondrous tints and lights that seem to glisten in the sun. In form they are no less varied, some being similar to a cactus dahlia, others with the simplicity of the daisy—all of them ideal for cutting. Only a limited quantity offered for the first season.

FIELD-GROWN CLUMPS TO FLOWER NEXT YEAR
\$1.00 Each, \$10.00 a Dozen

Purity—Perfectly round, very double, pure white.
Rutherford—Snappy red, semi-double with light center.
Rosy Morn—Beautiful red rose double, center petals curled light pink, grading to bright yellow.

These and twelve others, equally good, 18 new named varieties for \$12.00.

OUR HOME GROWN ROSES should be planted in the Autumn. ORDER NOW to get the best selection of large, vigorous, hardy bushes. Every one dependable—true to name.

Evergreens, Trees, Flowering Shrubs and especially Old Fashioned Flowers for Autumn Planting are described in our Catalog sent on request.

Bobbink & Atkins
Rutherford, New Jersey

MOHICAN SUPREMACY

There are lots of POOR Peonies; why not have the benefit of really expert advice? Our fame is nationwide. 'Most everybody everywhere knows of the ABSOLUTE SUPREMACY of our Peonies. Do you? One of the REASONS is because

WE GROW PEONIES—NOTHING ELSE

Suspensions of the other reasons will be awakened by our catalogue. Instant confirmation of them if you could visit our grounds and see the plants growing—the stock we send to you. Ask those who have been here

—and they cost no more from us

"OUR REPUTATION HAS BEEN BUILT ON THE QUALITY OF OUR STOCK"

WE SEND ONLY IN THE FALL AND OUR ANNUAL CATALOG IS NOW READY, IT'S UNIQUE—DISTINCTIVE—VERY DIFFERENT FROM OTHERS. MAY WE SEND YOU A COPY?

Free, if you'll kindly mention the "Sun."

MOHICAN PEONY GARDENS
BOX 666, SINKING SPRING, PENN'A.